

CLAIMS

What is claimed is:

1. A method of setting a counter wheel in a camera, comprising:
 - (a) providing a camera body, including,
 - 5 a film cassette chamber,
 - a film roll chamber, and
 - a sprocket assembly, at least a portion of which is mounted to said camera body between said film cassette chamber and said film roll chamber, said sprocket assembly including a sprocket wheel and a locking member, wherein said
 - 10 locking member periodically locks to prevent rotation of said sprocket wheel, said locking member including a mating portion;
 - (b) locking said sprocket wheel with said locking member;
 - (c) providing a counter wheel including counting indicia and a complementary portion for mating with said mating portion;
 - 15 (d) placing said counter wheel in rotational engagement with said camera body;
 - (e) rotating said counter wheel in a first direction until said complementary portion locks with said mating portion to prevent further rotation of said counter wheel in said first direction;
 - (f) placing a plate over said counter wheel to lock said counter wheel to said camera
 - 20 body;
 - (g) loading a web of film across a portion of said film sprocket, from said film cassette chamber to said film roll chamber;
 - (h) providing a front camera cover and a rear camera cover; and
 - (i) matingly engaging said front camera cover and said rear camera cover to form a
 - 25 camera housing including said camera body, said plate and said web of film located therein.
2. The method of claim 1, wherein said counter wheel additionally includes a plurality of teeth spaced around the periphery thereof, and wherein said sprocket
- 30 assembly includes a single tooth thereon, said single tooth being engaged with said

counter wheel such that one full rotation of said film sprocket results in the rotation of said counter wheel in a second direction by one of said plurality of teeth.

3. The method of claim 2, additionally including the step of pre-winding said web of film into a roll in said film roll chamber, wherein said counter is set to its starting position by said pre-winding step.

4. The method of claim 3, wherein said counter indicia is located on the top surface of said counter wheel and said complementary portion includes a protrusion having at least one straight edge.

5. The method of claim 4, wherein said mating portion includes a shoulder including at least one straight edge to abut said straight edge of said complementary portion.

6. The method of claim 5, wherein said counter wheel additionally includes alignment indicia visible on said top surface.

7. The method of claim 6, wherein said alignment indicia includes a first hole;

8. The method of claim 6, wherein said alignment indicia includes a visual indicator silkscreened onto said counter wheel.

9. The method of claim 6, wherein said placing said counter wheel step further includes aligning said sprocket assembly with said alignment indicia.

10. The method of claim 7, wherein said plate includes a second hole which is aligned with said first hole after said placing step.

11. The method of claim 3, wherein said sprocket assembly additionally includes a sprocket shaft, a first cam and a second cam, wherein each of said film sprocket, said first cam and said second cam is mounted concentrically around said shaft.
- 5 12. The method of claim 11, wherein said first cam includes an indentation and said locking member includes a locking finger, wherein said locking finger engages said indentation to lock said film sprocket in said locking step.
- 10 13. The method of claim 12, wherein said second cam is a ramped cam having an outer diameter eccentrically located from said shaft, said cam including a groove in said ramp portion, said locking member additionally including a follower finger, such that said follower finger engages said groove to discourage said film sprocket from moving, after said placing the counter wheel step and prior to said loading step.
- 15 14. The method of claim 13, wherein said locking member includes a release claw and a striker, wherein said release claw includes said locking finger and said striker includes said follower finger.
- 20 15. A camera, comprising:
a camera body, including,
a film cassette chamber,
a film roll chamber, and
a sprocket assembly, at least a portion of which is mounted to said camera body
between said film cassette chamber and said film roll chamber, said sprocket
25 assembly including a sprocket wheel and a locking member, wherein said locking member periodically locks to prevent rotation of said sprocket wheel, said locking member including a mating portion;
a counter wheel including counting indicia and a complementary portion for initially mating with said mating portion;

a plate located over said counter wheel to lock said counter wheel to said camera body;
a web of film loaded across a portion of said film sprocket, from said film cassette chamber to said film roll chamber; and
5 a front camera cover and a rear camera cover engaged to form a camera housing including said camera body, said plate and said web of film located therein; and wherein said counter wheel additionally includes a plurality of teeth spaced around the periphery thereof, and wherein said sprocket assembly includes a single tooth thereon, said single tooth being engaged with said counter wheel such that one
10 full rotation of said film sprocket results in the rotation of said counter wheel in a second direction by one of said plurality of teeth..

16. The camera of claim 15, wherein said counting indicia is located on the top surface of said counter wheel and said complementary portion is located on the bottom
15 surface of said counter wheel, wherein said complementary portion is a wedge shaped protrusion and said mating portion is a shoulder shaped to abut a portion of said wedge.

17. The camera of claim 16, wherein said counter wheel additionally includes alignment indicia visible on said top surface to assist visually in aligning said mating
20 structure with said complementary structure when initially assembled.

18. The camera of claim 17, wherein said wedge is located opposite from said counter wheel from said alignment indicia and on a different surface.

25 19. The method of claim 18, wherein said sprocket assembly additionally includes a sprocket shaft, a first cam and a second cam, wherein each of said film sprocket, said first cam and said second cam is mounted concentrically around said shaft, said first cam including an indentation and said locking member includes a locking finger, wherein said locking finger engages said indentation to initially lock said film sprocket.

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20. The method of claim 19, wherein said second cam is a ramped cam having an outer diameter eccentrically located on said shaft, said cam including a groove in said ramp portion, said locking member additionally including a follower finger, such that said follower finger engages said groove to discourage said film sprocket from moving,
- 5 after said locking finger is released from said first cam and prior to film pre-winding.